404 PRECURSORS OF CARDIOVASCULAR DISEASE IN A RURAL COMMUNITY - A CROSS - SECTIONAL STUDY.

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The Philippines is experiencing an increasing number of cases of ischemic heart disease and hypertension. Since there is a strong association between the presence of risk factors and development of heart disease, this study was conducted to evaluate the extent of high blood pressure, smoking and serum cholesterol level in a sample population living in a rural community of Pila, Laguna.

A random sample of 300 males aged 30 to 70 years drawn from a household register of 2 villages were studied. A validated questionnaire was used to evaluate the presence or absence of these risk factors. The results were: $\bar{x}$ age 45 $\pm$ 10 (33-67 yrs)., $\bar{x}$ weight 50 $\pm$ 10 (37-93 kg) and $\bar{x}$ height 162 $\pm$ 5 (148-181 cm). Their mean systolic blood pressure (SBP) was 132 $\pm$ 22 (78-230 mmHg) and mean diastolic pressure (DBP) was 80 $\pm$ 12 (54-126 mmHg). Seventy two (24%) were told of having a raised blood pressure but only 34 (11%) were truly hypertensive (SBP >160 and/or DBP >95). Fifty seven (19%) had been on drug treatment at one time. One hundred seventy nine (60%) were smokers averaging 14 $\pm$ 8 sticks/day (1-40) and began smoking at a mean age of 18 $\pm$ 5 (10-40 yrs). The mean serum cholesterol was 4.5 $\pm$ 2 (2.2-8.9 mmol) in which 8 (2.6%) had hypercholesterolemia (>7.0 mmol).

In conclusion, in a rural Philippine community the most prevalent risk factor of cardiovascular disease is smoking. Hypertension is a moderately prevalent condition and high serum cholesterol level does not seem to be a significant risk factor. Therefore, the major thrust in the prevention of heart disease in this community should be the control of smoking.

405 AN APPRAISAL OF INTEGRATED MOTHER AND CHILD HEALTH INTERVENTION PROGRAMME IN RURAL AREA OF RAJASTHAN

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A five year Integrated Mother and Child Health (MCH) Intervention Programme, with support of Indian Council of Medical Research(ICMR), is being implemented in rural block PHC area of Rajasthan State, covering 120,000 population. The Intervention Programme, based on risk approach, aims at 1) improving coverage, quality and utilization of MCH Services and 2) reduction in maternal and child mortality. The programme consists in identifying high risk pregnant women, provide quality ante-natal care and referral support. The programme is implemented through the existing health infrastructure and functionaries, since January, 1988.

It would be too early to evaluate the impact on maternal and infant mortality, however, since the start of the programme, the coverage and utilization of services has markedly improved. Registration of pregnant women has increased upto 80.0 percent from mere 10.0 percent. 60-65.0 percent received prophylactic tetanus toxoid injections. The same proportion received blood examination, urine examination and blood pressure check-up which were earlier not done at the village level. Semi sterilised disposable delivery packs were used in more than 80.0 percent of deliveries.

The TBAs have played a major role.

The paper analyses the performance and the processes involved and future possibility of replication of the strategy in other parts.

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407 CANCER NEAR THREE MILE ISLAND

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Purpose: To investigate cancer risk (mainly leukemia, childhood malignancies) among 160,000 residents within a 10 mile radius of The Three Mile Island (TMI) nuclear power plant, in relation to releases from the 1979 accident and routine emissions.

Methods: Exposures were estimated from mathematical dispersion models that accounted for wind and terrain; accident emissions were validated against off-site dosimeters. Incident cancers in the period 1975-1985 (n=5493) were found by reviewing records of all local and regional hospitals. Preaccident and postaccident trends in cancer rates were examined in logistic analyses adjusted for age, sex, population density, income and education.

Results: For accident emissions, no associations were seen for leukemia in adults or for childhood cancers. For routine emissions, the odds ratios were raised for all childhood cancers and for childhood leukemia specifically but confidence intervals were wide (OR=1.5, 95% CI 0.7, 3.5; OR = 2.2, 95% CI 0.5, 8.6, respectively). The trend was negative for leukemia in adults. NonHodgkin's lymphoma and lung cancer showed raised risks in relation to both accident and routine emissions.

Conclusion: Overall, given the lack of clearcut effects on children and on radiosensitive sites like leukemia, the pattern of results does not provide convincing evidence that TMI releases influenced cancer risk during the limited period of follow-up.

408 CANINE LUNG CANCER AND PASSIVE EXPOSURE TO CIGARETTE SMOKE.

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The risk factors associated with the development of primary canine lung cancer have been inadequately studied. A case-control study was conducted in order to determine whether passive exposure to environmental tobacco smoke was associated with an increased risk for the disease in dogs, as it is in humans. Cases (n=51) were obtained from two veterinary teaching hospitals and were confirmed histologically. Controls with other forms of cancer, not related to smoking in humans, were obtained from the same hospitals (n=83). Exposures assessed included the presence of a smoker in the home, the number of smokers, the amount smoked and the time spent by the subject indoors per day. The crude odds ratio for exposure to passive smoke was 1.49 (95% CI 0.7 -3.0), which fell to 1.32 (95% CI 0.6-2.8) after adjustment for state of residence. Additional adjustment for confounding by multiple logistic regression had little effect on the risk estimate. There was little evidence of a dose-response. An exposure index containing number of smokers, packs and time spent indoors was not related with increasing risk. Despite the weak nature of the relationship between passive smoke exposure and lung cancer risk in dogs, the study supports increased use of animal models as sentinels for human risk from environmental exposures.

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